```
1
              IN THE UNITED STATES DISTRICT COURT
              FOR THE EASTERN DISTRICT OF TEXAS
 2.
                         TYLER DIVISION
    ERICSSON, INC., ET AL
 4
                                     DOCKET NO. 6:10cv473
         -vs-
                                 )
 5
                                     Tyler, Texas
                                     9:00 a.m.
                                 )
  D-LINK CORPORATION, ET AL
                                    June 6, 2013
 7
                      TRANSCRIPT OF TRIAL
 8
                        MORNING SESSION
 9
               BEFORE THE HONORABLE LEONARD DAVIS,
         UNITED STATES CHIEF DISTRICT JUDGE, AND A JURY
10
11
                      APPEARANCES
12
13 FOR THE PLAINTIFFS:
14
   MR. THEODORE STEVENSON, III
15 MR. DOUGLAS A. CAWLEY
   McKOOL SMITH
16 300 Crescent Court, Ste. 1500
   Dallas, Texas 75201
17
18 MR. JOHN B. CAMPBELL, JR.
   McKOOL SMITH
   300 W. 6th Street, Suite 1700
   Austin, Texas 78701
20
21 COURT REPORTERS:
                            MS. JUDITH WERLINGER
                            MS. SHEA SLOAN
22
                            shea_sloan@txed.uscourts.gov
23
    Proceedings taken by Machine Stenotype; transcript was
24 produced by a Computer.
25
```

1 FOR THE DEFENDANT: MR. GREGORY S. AROVAS 3 KIRKLAND & ELLIS, LLP 601 Lexington Avenue 4 New York, New York 10022 6 MR. LUKE DAUCHOT KIRKLAND & ELLIS, LLP 333 S. Hope Street 29th Floor Los Angeles, California 90071 9 10 MR. ADAM ALPER KIRKLAND & ELLIS, LLP 555 California St. 24th Floor 12 San Francisco, California 94104 13 14 MR. MICHAEL E. JONES POTTER MINTON, PC 15 110 N. College, Ste. 500 P.O. Box 359 16 Tyler, Texas 75710-0359 17 18 MR. ROBERT A. VAN NEST KEKER & VAN NEST, LLP 633 Sansome St. San Francisco, California 94111 20 21 22 23 24 25

3 PROCEEDINGS 1 2 (Jury out.) COURT SECURITY OFFICER: All rise. 3 THE COURT: Please be seated. All right. Mr. Jones, I understand 5 there's an issue. 6 7 MR. JONES: I believe there are two 8 issues, Your Honor. 9 Mr. Bone -- first thing, we just need some guidance from the Court. Mr. Bone and I tried to 10 coordinate our examination, and what I believe we have -- and you certainly correct me if I'm wrong -- is when he gets through with the sealed portion, there will 14 be about 10 minutes for him to wrap up. He asked me 15 about mine; and as we were coordinating, I said I have 16 about 5 to 10 minutes to introduce me getting back into 17 the sealed --18 THE COURT: Could you speak to the 19 microphone? 20 MR. JONES: I'm sorry, Your Honor. I apologize. 21 22 Then I have about 5 to 10 minutes 23 introduction before I get into the sealed portion of

THE COURT: Oh, okay.

24 those license agreements.

```
1
                   MR. JONES: Our suggestion, and it's
   merely a suggestion, was that you might want to keep it
    sealed the entire time so we don't run in and run out.
 4
                   But we were just wanting to inform the
   Court of -- that we had coordinated, and that was kind
 5
    of the time that we were going to be looking at.
 6
 7
                   THE COURT: Okay. Well, I'm not a fan of
 8
    sealing the courtroom.
9
                   MR. JONES: I understand, Your Honor.
10
                   THE COURT: So we're not going to keep it
11
    sealed when it doesn't need to be sealed.
12
                   MR. JONES: Okay. Thank you, Your Honor.
13
                   THE COURT: That's how we'll deal with
14
    that.
15
                   MR. JONES: And -- and one other thing.
                   Obviously, we are now going into
16
    testimony about the licenses that we have contended are
17
18
   not comparable as broad general cross-licenses for the
   reasons set out in our Motion in Limine and Dauberts --
   further reasons besides the fact that they are broad
20
21
   general cross-licenses.
22
                   We are also about to commence testimony
23
   about calculations for royalty rates from these, and
   they're based on the price of the products in total and
```

percentage royalties and caps. And we believe that that

- 1 is improper for violating the entire market value rule
- 2 and testimony about improper apportionment.
- 3 For those reasons, we are going to object
- 4 to that testimony.
- 5 But instead -- and we already know Your
- 6 Honor's ruling -- and in light of your rulings on the
- 7 Dauberts and Motions in Limines, but we would ask for a
- 8 continuing objection so we don't have to object to all
- 9 those questions.
- 10 THE COURT: Any objection to that?
- MR. CAMPBELL: No, Your Honor.
- 12 THE COURT: All right. You may have the
- 13 continuing objection.
- 14 MR. JONES: Thank you, Your Honor.
- 15 THE COURT: All right. Anything further
- 16 before we bring the jury?
- 17 (No response.)
- 18 THE COURT: All right. Bring the jury
- 19 in.
- 20 COURT SECURITY OFFICER: All rise.
- 21 (Jury in.)
- THE COURT: Please be seated.
- 23 Good morning, Ladies and Gentleman of the
- 24 Jury. Y'all always look so much better in the morning
- 25 than you do in the afternoon, and it's understandable.

- 1 All right. You may -- may proceed,
- 2 Counsel.
- 3 MR. CAMPBELL: Thank you, Your Honor.
- 4 JOHN BONE, PLAINTIFFS' WITNESS, PREVIOUSLY SWORN
- 5 CROSS-EXAMINATION (CONTINUED)
- 6 BY MR. CAMPBELL:
- 7 Q. Mr. Bone, you might just remind the jury where
- 8 we're at in terms of what we discussed yesterday and
- 9 where we're headed now.
- 10 A. I believe where we left off is we were just
- 11 about to go into the license agreements that Ericsson
- 12 has entered into with a number of other companies to
- 13 license their technology.
- 14 Q. Okay.
- MR. CAMPBELL: And, Your Honor, at this
- 16 point, we need to go into the financial terms of those
- 17 licenses which have all been designated attorneys' eyes
- 18 only.
- 19 THE COURT: All right. At this time
- 20 we'll seal the courtroom. If you're not an attorney or
- 21 an expert witness who is subject to the protective order
- 22 that's been entered in this case, then you need to leave
- 23 the courtroom at this time. We'll let you know when you
- 24 can come back in.
- So please leave the courtroom if you're

```
not covered by the Court's protective order.
 2
                   (Pause.)
 3
                   THE COURT: I'm glad none of you jurors
    tried to leave.
                   [Laughter]
 5
                   (Courtroom sealed.)
 6
 7
                   (Sealed Portion No. 4 of the Trial
 8
                   filed under separate cover.)
 9
                   (Courtroom unsealed.)
10
                   THE COURT: You may proceed.
11
                   MR. CAMPBELL: Thank you, Your Honor.
12
              (By Mr. Campbell) Okay, Mr. Bone. So let's
    talk about one last factor. You talked about it
   yesterday -- what a hypothetical negotiation entails and
15
   what a real-world negotiation entails.
16
              How does the differences there affect where
   you believe the parties would settle within the range of
17
18
   rates that you calculated?
19
              So in the real-world negotiations, there was
   no assumption of validity infringement, so each of the
20
   companies, Buffalo, RIM, HP, walked into the negotiation
21
22
   not assuming that they infringed valid patents.
23
              In the hypothetical negotiation, as I've said
   earlier, they would walk into the room knowing that they
```

25 infringed valid patents, and that would have the effect

- 1 of increasing the rate.
- 2 An analogy?
- 3 Q. Yeah. What -- do you have an analogy to
- 4 explain that?
- 5 A. I think a helpful analogy to think of this is
- 6 that right now the Defendants have said that they --
- 7 they don't infringe the technology. And so if you put
- 8 them in a room today, they probably wouldn't agree to,
- 9 you know, come up with a rate, or they'd be very -- they
- 10 would be willing to pay only a very small amount.
- 11 But if you put the -- if after the trial and
- 12 if -- let's assume that the jury finds that the patents
- 13 are valid and infringed; and if you put the Defendants
- 14 in a room with Ericsson knowing that they infringe valid
- 15 patents, that would change how much they would be
- 16 willing to pay. That would increase the amount that
- 17 they would be willing to pay for the technology.
- 18 Q. Okay. So you have these real-world licenses.
- 19 You took those into consideration. You made a number of
- 20 adjustments for comparability. Considered a number of
- 21 other factors.
- 22 After all that work, did you determine a
- 23 reasonable royalty that Ericsson and the Defendants
- 24 would agree to?
- 25 A. I did.

- 1 So based on that, I concluded that a royalty
- 2 rate for the routers would range from 34 cents to 59
- 3 cents; and that the royalty rate for the computer
- 4 Defendants would range from 25 cents to 88 cents.
- 5 Q. And did you determine where within that range
- 6 you believe the reasonable royalty would fall?
- 7 A. Well, I believe -- anywhere within that range,
- 8 I think, is reasonable. I think a reasonable
- 9 conclusion, though, is the 50-cent reference rate that
- 10 Ericsson has. And I think -- and that's squarely within
- 11 the middle of the rates.
- 12 Q. Okay. Now, let's just question that for a
- 13 minute. The -- the licenses we talked about, we don't
- 14 want to go into the financial details, but those were
- 15 for an entire portfolio.
- 16 This case has five patents-in-suit. Does that
- 17 make sense that the reference rate of 50 cents for an
- 18 entire portfolio and the rate for five patents-in-suit
- 19 would be the same?
- 20 A. Well, on the face it doesn't sound like it,
- 21 but it does when you consider the difference between the
- 22 assumptions you have to make in a hypothetical. And
- 23 there are a number.
- 24 For example, as -- as you've said, you'd have
- 25 to make some adjustment for the fact that we're only

- 1 dealing with five patents, as opposed to the whole
- 2 portfolio. Now, that would have a downward adjustment
- 3 to the rate.
- 4 But there are several factors that would
- 5 increase the rate to go up. For example, they're only
- 6 getting the U.S. rights, which are the more valuable
- 7 rights. That would tend to increase the rate.
- 8 They would not be getting grant-back, so that would have
- 9 to increase the rate again.
- 10 And -- and then the difference between the
- 11 hypothetical and the real world, the whole assumption
- 12 about walking into the room knowing that they infringe
- 13 valid patents, that would tend to increase the rate even
- 14 more.
- So it's my opinion, based on my analysis, that
- 16 I think a 50-cent rate under the hypothetical is a
- 17 reasonable conclusion for the five patents-in-suit.
- 18 Q. Okay. Okay. So now that we have a royalty
- 19 rate, we need a royalty base; is that right?
- 20 A. That's correct.
- Q. Okay. And what did you determine the royalty
- 22 base is in this case?
- 23 A. So based on the records that the Defendants
- 24 provided, I determined the actual devices that used
- 25 the -- that infringed the technology, and they amount to

- 1 what you see here in the tables.
- 2 So, for example, D-Link, over the period of
- 3 time, sold 2.9 million routers.
- Q. Okay. And is this -- is this all the Wi-Fi
- 5 products that the Defendants have sold?
- 6 A. No.
- 7 Q. Okay. Well, when does this start? When did
- 8 you start calculating the royalty base?
- 9 A. So this calculation only begins when the
- 10 Defendants receive notice from Ericsson that they
- 11 infringed every single patent in this case. So they
- 12 actually were selling products before then, but I've
- 13 only included those sales after they were informed that
- 14 they infringed the patents.
- 15 Q. Well, can a company infringe a patent even if
- 16 it's not on notice of the patent?
- 17 A. That's my understanding.
- 18 Q. Okay. But how many of these -- how many of
- 19 these devices in your list here are before the
- 20 Defendants had notice?
- 21 A. None.
- Q. Okay. Okay. And we don't need to read this
- 23 into the record, but we do need to read into the record
- 24 the exhibits that this comes from, and this comes from
- 25 PX 499 to 502, 508, 510, 541, 553, 554, 557 through 561;

- 1 is that correct?
- 2 A. That's correct.
- 3 Q. Okay. Okay. Now, let's make sure -- you
- 4 talked yesterday about a number of factors that you need
- 5 to consider in your reasonable royalty analysis. Do you
- 6 recall that?
- 7 A. I do.
- 8 Q. Okay. Let's make sure we cover all of those
- 9 and have considered all of those.
- 10 Have you considered the royalty rates paid for
- 11 the use of the patents by other companies that have
- 12 permission to use Ericsson's Wi-Fi patents?
- 13 A. I have. That's a lot of what we've been
- 14 talking about.
- 15 Q. Okay. What about royalty rates for comparable
- 16 patents paid by the infringer, have you considered that?
- 17 A. Yes, I did. The Defendants produced 400
- 18 agreements -- license agreements, and there were license
- 19 agreements with a handful of companies that licensed
- 20 Wi-Fi technology. And based on my review of those
- 21 license agreements, I did not find those to be
- 22 comparable.
- Q. Okay. What about the nature and the scope of
- 24 the license, did you consider that factor?
- 25 A. Yes. So we've talked about that to some

- 1 extent. This is going to be a non-exclusive license,
- 2 and it would only be for world -- excuse me, U.S.
- 3 rights.
- 4 Q. Okay. How about Ericsson's licensing
- 5 policies, did you consider that?
- 6 A. Yep, we talked about that. We talked about
- 7 the fact that they have a RAND commitment, and we also
- 8 talked about the reference rate.
- 9 Q. Okay. What about the commercial relationship
- 10 between Ericsson and the infringer Defendants?
- 11 A. Well, we haven't talked about that
- 12 specifically, but that's something I considered.
- 13 Ericsson and the Defendants do not compete and -- but --
- 14 but the -- Ericsson's licensees, the companies that
- 15 entered into the license agreements do -- do compete
- 16 with the -- with the Defendants.
- 17 Q. Okay. How about the profitability, success,
- 18 and popularity of the products covered by the patents?
- 19 A. Yes, I have considered that. That -- this
- 20 factor is accounted for when you look at the market
- 21 rates. The market rates consider this factor.
- 22 Q. Okay. What about the advantages over prior
- 23 devices and benefits of the patented invention?
- 24 A. Yes. In the same way, the market rates
- 25 account for these very factors.

- 1 Q. Okay. What about the extent of use of the
- 2 patents by the infringer?
- 3 A. So we just talked about that. That would be
- 4 the royalty base with the number of infringing units
- 5 that the Defendants sold.
- 6 Q. Okay. And what about the portion of the
- 7 profit due to the invention?
- 8 A. That would also be accounted for in the market
- 9 rates.
- 10 Q. Okay. And what about the duration of the
- 11 patents?
- 12 A. So patents generally have a 20-year life, and
- 13 based on the date of filing, they expire between 2016
- 14 and 2020.
- 15 Q. Okay. Okay. So let's wrap it up. You
- 16 calculated a reasonable royalty rate, you've calculated
- 17 a royalty base. How do we determine the total
- 18 reasonable royalty?
- 19 A. So in this example, we have -- or in this
- 20 slide we have a calculation where we've applied the
- 21 50-cent rate to the infringing sales. So in this case,
- 22 let's use D-Link as an example. You take 2.9 million
- 23 routers -- infringing routers that were sold, multiply
- 24 it by the 50 cents per unit to get 1.4 million in
- 25 royalties due -- or damages.

- Q. Okay. And this might be a little bit tedious,
- 2 but we need a clear record. How does that work out for
- 3 the rest of the Defendants? Can you go through that for
- 4 me?
- 5 A. Sure.
- 6 So for Belkin, if you take the 4 million
- 7 routers -- infringing routers multiplied by the 50
- 8 cents, you get \$2 million.
- 9 For NETGEAR, if you take the 23.7 million
- 10 routers, multiply it by 50 cents, you get 11.8 million.
- 11 For Acer/Gateway, if you take the 7.8 million
- 12 computers that infringe, multiply it by 50 cents, you
- 13 get \$3.9 million.
- 14 For Dell, if you take 12.8 million computers,
- 15 multiply it by 50 cents, you get 6.4 million.
- 16 And for Toshiba, if you take the 16.3 million
- 17 computers, multiplied by 50 cents per unit, you get 8.1
- 18 million.
- 19 Q. Thank you, Mr. Bone.
- 20 A. Thank you.
- 21 THE COURT: All right.
- 22 Cross-examination.
- MR. JONES: Thank you, Your Honor.
- 24 Here, you wanted another notebook, didn't
- 25 you?

- 1 THE WITNESS: Yeah. Thank you.
- 2 MR. JONES: There you go.
- 3 Your Honor, for the Court.
- 4 THE COURT: Thank you.
- 5 MR. JONES: Mr. Campbell.
- 6 CROSS-EXAMINATION
- 7 BY MR. JONES:
- 8 Q. Good morning, Mr. Bone. Welcome to Texas.
- 9 A. Thank you. Good morning.
- 10 Q. I'd like to just first start out with kind of
- 11 making sure we talk about the process we've been through
- 12 and make sure the jury understand it.
- 13 You were hired by the Plaintiffs to be their
- 14 expert in this case, right?
- 15 A. That's correct.
- 16 Q. Then you do a lot of work, look at thousands
- 17 of documents, right, sir?
- 18 A. That's correct.
- 19 Q. Then you form your opinions, right, sir?
- 20 A. Yes, sir.
- 21 Q. And then the next step is you write reports,
- 22 and I think it happened in the early part of this year.
- 23 You write reports that fully and accurately set forth
- 24 your opinions and the basis therefor, right, sir?
- 25 A. That's correct.

- 1 Q. So when I refer to your reports, that's what
- 2 I'm referring to; fair enough?
- 3 A. Fair enough.
- 4 Q. Okay. And then after that, you give a
- 5 deposition and you were kind enough -- you hosted me in
- 6 Chicago like I'm hosting you in Tyler today, right, sir?
- 7 A. Yes, sir.
- 8 Q. It was colder then, wasn't it?
- 9 A. It was.
- 10 Q. And I took your deposition, and I was given
- 11 the opportunity to ask you questions about your
- 12 opinions, right, sir?
- 13 A. Yes, sir.
- Q. And we -- and when we refer to your
- 15 deposition, that's what we're talking about, right?
- 16 A. Correct.
- 17 Q. Okay. Great. Now, another kind of
- 18 housekeeping deal. Make sure we all understand it.
- 19 You've assumed that the patents are valid and
- 20 infringed, right?
- 21 A. That's correct.
- Q. You have no dog in that fight, no opinion on
- 23 that, right, sir?
- A. That's correct.
- O. Okay. But you've assumed that.

- 1 And you would agree with me that if a patent's
- 2 invalid, then damages are zero, right, sir?
- 3 A. That's correct.
- Q. And if a patent is not infringed, then damages
- 5 for that patent are zero, right, sir?
- 6 A. That's correct.
- 7 Q. Thank you, sir.
- 8 Now, you have talked about your rates. And in
- 9 your report you stated a range of rates, right?
- 10 A. That's correct.
- 11 Q. And in your report, you said that for Belkin,
- 12 NETGEAR, and D-Link -- and those are those router
- 13 Defendants, right, sir?
- 14 A. That's correct.
- 15 Q. -- that the lowest of the range of reasonable
- 16 royalty rates would be 34 cents. Do I have that right?
- 17 A. That's correct.
- 18 Q. Okay. Now, with regard to the computer
- 19 Defendants, Acer, Dell, and Toshiba, you told us in
- 20 their reports that the lowest royalty -- reasonable
- 21 royalty that you saw in that range would be 25 cents per
- 22 unit, right, sir?
- 23 A. That's correct.
- Q. Thank you, sir.
- Now, this chipset right here, this is a Wi-Fi

- 1 chip. You've seen these before. You've been in the
- 2 courtroom, right, sir?
- 3 A. I have, yes.
- 4 Q. This is one made by Intel, and it costs about
- 5 \$2.50, right, sir.
- 6 A. That's my understanding.
- 7 Q. Okay. Thank you, sir.
- 8 Now, Dr. Nettles yesterday, he told us, did he
- 9 not, that it was the chips that were at issue in this
- 10 case, right, sir?
- 11 A. I believe that was his testimony.
- 12 Q. And he also told us that when you want to
- 13 decide whether or not these patents that you're talking
- 14 about, these five patents are infringed, it was the
- 15 chips that he tested, right, sir?
- 16 A. I believe that's correct, yes.
- 17 Q. And with regard to 802.11n Wi-Fi, that's where
- 18 all the magic takes place. I don't understand it all;
- 19 maybe you do. But that's where the magic takes place
- 20 for 802.11n Wi-Fi; it's on this chip, right, sir?
- 21 A. I'm not a technical person, but that is my
- 22 understanding.
- Q. Okay. So if we want that laptop, like the one
- 24 you got in front of you right here, to do Wi-Fi, it's
- 25 got to have one of these chips in it --

- 1 A. That's --
- 2 Q. -- fair enough?
- 3 A. Fair enough.
- 4 Q. Okay, great.
- Now, with regard to this particular chip, in
- 6 your deposition, you told me that the lowest possible
- 7 reasonable royalty for it could be as low as 25 cents,
- 8 right, sir?
- 9 A. That's correct.
- 10 Q. Thank you, sir.
- 11 Now, at this point in time, are you telling me
- 12 that the reasonable royalty for this chip should be 50
- 13 cents?
- 14 A. Yes.
- 15 Q. So your -- your position is that the
- 16 reasonable royalty for this chip that costs \$2.50, it
- 17 should be 50 cents, right, sir?
- 18 A. It's within my range, yes.
- 19 Q. Okay. And, in fact, you're also saying --
- 20 because there's -- you know, again, about procedures in
- 21 this case, there's another expert that's going to
- 22 testify in this case, Dr. Perryman, right?
- 23 A. Correct.
- Q. And he's an economist, right, sir?
- 25 A. I don't recall his credentials.

- 1 Q. Okay. Great. No problem. We'll let him do
- 2 that.
- 3 Okay. But his royalty rate for this chip is
- 4 around a penny, right, sir?
- 5 A. That's what I understand, yes.
- 6 Q. So your royalty rate is 50 times his royalty
- 7 rate; is that correct?
- 8 A. I'll trust your math.
- 9 Q. Okay. Great.
- 10 Now, did you do any analysis of the gross
- 11 profit margin concerning this chip?
- 12 A. No, sir.
- Q. Did you do any analysis of the net profit
- 14 margin concerning this chip?
- 15 A. No, I did not.
- 16 Q. Now, at the time of your deposition, did you
- 17 tell me that you had not determined the highest royalty
- 18 rate that could be charged by Ericsson that would meet
- 19 its RAND obligations?
- 20 A. I think that's correct.
- Q. Okay. You've made no determination like that,
- 22 right, sir?
- 23 A. No.
- Q. Thank you.
- MR. JONES: Now, Your Honor, I need to go

```
1 into the license agreements at this time and would
```

- 2 request that the courtroom be sealed.
- 3 THE COURT: We'll seal the courtroom
- 4 again, with the Court's apologies. If you're not
- 5 covered by the protective order that's been entered in
- 6 this case, you need to leave the courtroom at this time.
- 7 (Pause.)
- 8 (Courtroom sealed.)
- 9 (Sealed Portion No. 5 of the Trial
- 10 filed under separate cover.)
- 11 (Courtroom unsealed.)
- MR. JONES: May I begin, Your Honor?
- THE COURT: Yes, you may.
- MR. JONES: Thank you, sir.
- 15 Q. (By Mr. Jones) Now, the next issue I'd like to
- 16 talk about just a little bit is a royalty stacking.
- 17 When we talk about royalty stacking, what are
- 18 we talking about?
- 19 A. Royalty stacking is an issue -- or can be an
- 20 issue if there are numerous companies that have patents
- 21 on a particular technology and a company has to take
- 22 licenses from everybody that has patents on that
- 23 technology.
- Q. Thank you, sir.
- Now, in your report, you conclude that with

- 1 regard to this matter, royalty stacking is a
- 2 theoretical, not an actual issue; is that right?
- 3 A. That is correct.
- 4 Q. Now, let's talk about that just for a second.
- 5 You know that in the 802.11 standard process -- you've
- 6 heard the testimony, as the jury -- that certain
- 7 companies, during the process, will give letters of
- 8 assurances that say: We will license our patents.
- 9 You know that, don't you, sir?
- 10 A. Yes.
- 11 Q. How many companies wrote letters of assurance
- 12 concerning 802.11-compliant chips?
- 13 A. A lot. I don't remember the number offhand.
- 14 Q. Okay. In Dr. Perryman's report -- again, he's
- 15 the economic expert for the Defendants. You know Dr.
- 16 Perryman. You've seen his reports, right?
- 17 A. Yes, I have.
- 18 Q. Okay. He said that there were 121 companies
- 19 that wrote 274 letters of assurance. Does that sound
- 20 right?
- 21 A. I'll take your word for it.
- Q. Thank you.
- Now, how many wrote letters of assurances for
- 24 802.11n?
- 25 A. I don't recall offhand.

- 1 Q. Okay. He said in his report 32 companies with
- 2 32 letters of assurance. Does that sound right -- about
- 3 right?
- 4 A. That sounds -- that sounds about right.
- 5 Q. How many -- let me ask you this: How many
- 6 patents were declared essential in that process to
- 7 802.11 through those letters? Do you know that figure?
- 8 A. Some are blanket, so you can't really tell,
- 9 but there were a lot.
- 10 Q. Okay. He said at least 977. Do you disagree
- 11 with that?
- 12 A. No.
- 13 Q. Okay. Then how many patents were declared
- 14 essential to the 802.11n standard in those letters of
- 15 assurance?
- 16 A. A lot were declared by the companies, yes.
- 17 Q. He said at least 233. Would you agree with
- 18 that?
- 19 A. I'm trying to recall his analysis, but I
- 20 believe that's what he said.
- 21 Q. Okay. Now, with regard to -- and do you
- 22 disagree with that figure? Do you contest that figure,
- 23 that there are 233 patents that have been declared -- at
- 24 least that have been declared essential to 802.11n?
- 25 A. Again, I'd have to see his analysis to confirm

- 1 that. I know he had -- he made some estimates, and
- 2 without seeing it, it's hard for me to say.
- 3 Q. Is that -- is that figure in the ballpark?
- 4 A. I don't know.
- 5 Q. Okay. All right. Fair enough.
- 6 Well, let's move on then. Let me -- let me
- 7 ask you this: You would agree with me, when we look at
- 8 the standard, we don't see in the standard a list of all
- 9 the patents that apply, right?
- 10 A. That's correct.
- 11 Q. And you would also agree with me that we can't
- 12 go to any minute of a committee meeting of the 802.11
- 13 where they list all the patents that apply to their
- 14 standards, right?
- 15 A. That's correct.
- 16 Q. Okay. Now, did you -- in all of your work on
- 17 damages and the aspects of these products, did you
- 18 determine the Defendants' contribution to 802.11?
- 19 A. In part, through the analysis of the rates
- 20 that other companies were willing to pay.
- 21 Q. Well --
- 22 A. So to some extent, yes.
- Q. Well, let's go -- let's -- do you remember we
- 24 talked about that on your deposition?
- 25 A. Vaquely.

- 1 Q. Okay. Great. Well, let's try to remind you.
- 2 MR. JONES: Let's go to Slide 2?
- 3 Q. (By Mr. Jones) And if go to Slide 2, during
- 4 your deposition, I asked you: Were any of the
- 5 Defendants involved in the 802.11 standard-making
- 6 process before the IEEE?
- 7 And I'm saying -- I'm just trying to think
- 8 through what I recall from that. Does your report
- 9 discuss that at all?
- 10 And you said: I don't believe it does, right?
- 11 A. That's correct.
- 12 Q. All right. Thank you, sir.
- 13 Do you know what standard essential patents
- 14 were declared by the Defendants during this process?
- 15 A. During which process?
- 16 Q. 802.11 -- 802.11n. Let's go to it
- 17 specifically, since that's what we're dealing with in
- 18 this case.
- 19 A. I believe it was a blanket -- blanket
- 20 disclosure.
- Q. And do you know which Defendants made that?
- 22 A. I'm sorry. I may have misunderstood your
- 23 previous question.
- Q. Do you know which Defendants declared certain
- 25 essential patents and wrote letters of assurance?

- 1 A. I believe all of them did.
- 2 Q. Thank you, sir.
- 3
 THE COURT: Mr. Jones, let me ask you,
- 4 how much longer you would anticipate?
- 5 MR. JONES: Well, a little bit, Your
- 6 Honor.
- 7 THE COURT: All right. Why don't we go
- 8 ahead and take our morning break at this time then.
- 9 We'll be in recess until 10:35.
- 10 COURT SECURITY OFFICER: All rise.
- 11 (Jury out.)
- 12 (Recess.)
- 13 COURT SECURITY OFFICER: All rise for the
- 14 jury.
- 15 (Jury in.)
- 16 THE COURT: Please be seated.
- 17 All right. You may proceed, Mr. Jones.
- 18 MR. JONES: May it please the Court.
- 19 Q. (By Mr. Jones) We were talking about 802.11n
- 20 essential patents. You do not have an opinion on
- 21 Ericsson's actual share of 802.11n patents, right, sir?
- 22 A. That's correct.
- Q. And you also have expressed no opinion in your
- 24 report or your deposition about the actual share of the
- 25 patents on 802.11n that are owned by the Defendants,

- 1 right, sir?
- 2 A. That's correct.
- 3 Q. Now, we do know --
- 4 MR. JONES: Could we bring up Slide 6?
- 5 Q. (By Mr. Jones) This is a document -- it's
- 6 Defendant's Exhibit 81. And it's from a presentation
- 7 that was made by Ericsson. It's called their WLAN
- 8 Licensing Strategy, and it's dated May the 13th, 2012.
- 9 And you've looked at these documents of
- 10 Ericsson, right, sir?
- 11 A. I have.
- 12 Q. Okay. And it says that wireless local area
- 13 network patents are mainly held by chipset suppliers,
- 14 right?
- 15 A. That's what it says, yes.
- 16 Q. So expressed in this document, that's their
- 17 view, right, sir?
- 18 A. That's correct.
- 19 Q. Thank you, sir.
- 20 MR. JONES: And you can take that down.
- Q. (By Mr. Jones) Now, if we assume that there
- 22 are five patent holders that have patents applicable to
- 23 this chip, and they all get a 50-cent rate, like you're
- 24 calculating for Ericsson, that would come out to be
- 25 collective royalties of \$2.50, right, sir?

- 1 A. If they each got 50 cents, yes.
- 2 Q. Okay. Great.
- 3 And if we were to assume that there are 32
- 4 companies that gave letters of assurance, and each of
- 5 those companies got a 50-cent rate for their patents,
- 6 then the royalties from those patents collectively would
- 7 be \$16 on this chip, right?
- 8 A. If those assumptions held --
- 9 Q. Yeah.
- 10 A. -- that would be true.
- 11 Q. Sure.
- 12 And if we were to assume that there are 233
- 13 patents and they each get 10 cents per patent per unit
- 14 royalty rate, then on this particular chip, those
- 15 royalties total -- total -- totally would be \$23.30,
- 16 right?
- 17 A. If those assumptions held, that would be the
- 18 case, yes.
- 19 Q. And this chip, as we've already established,
- 20 costs \$2.50, right, sir?
- 21 A. At the current price, I think that's correct.
- Q. Thank you, sir. I appreciate it.
- Now, you looked at 400 licenses from the
- 24 Defendants; and you, as the Plaintiffs' expert, found
- 25 none of them instructive to you on your rate, right,

- 1 sir?
- 2 A. That's right.
- 3 Q. Thank you, sir.
- 4 Now, you've read the depositions of the
- 5 inventors, right, sir?
- 6 A. Yes, sir.
- 7 Q. Okay. You've also heard their testimony,
- 8 correct?
- 9 A. Yes.
- 10 Q. Okay. Now, in all of the documents that you
- 11 reviewed, you've not cited to anything in your report
- 12 where the inventors valued their patents, right, sir?
- 13 A. That's correct.
- 14 Q. Thank you, sir.
- Now, there's another expert that's going to
- 16 testify in this case, a Mr. Matthew Shoemake. And
- 17 you've read his reports, right?
- 18 A. I have.
- 19 Q. And he has extensive experience with regard to
- 20 IEEE committee meetings and things like that, right,
- 21 sir?
- 22 A. I think that's fair to say.
- Q. Thank you, sir.
- 24 At your deposition, you could tell me nothing
- 25 in his report that was factually incorrect about how he

- 1 said the IEEE viewed RAND, right, sir?
- 2 A. That's correct.
- 3 Q. Thank you, sir.
- 4 Now, finally, laptops have many components and
- 5 many features, right, sir?
- 6 A. Yes. I said that earlier, yes.
- 7 Q. Right. Thank you, sir.
- 8 And you've done no survey-type analysis to
- 9 show us which of those components or which of those
- 10 features drive sales, right, sir?
- 11 A. That is correct.
- 12 Q. Okay. Same thing's true about routers. They
- 13 have numerous features, correct? I think you and I, at
- 14 your deposition, agreed there were lots of features;
- 15 fair enough?
- 16 A. We did agree to that, yes.
- 17 Q. And you've done no survey work or that type of
- 18 analysis to determine what drives sales for routers,
- 19 right, sir?
- 20 A. That's correct, because I didn't need to.
- 21 Q. And then finally, you agree with me that these
- 22 chips, they have features beyond the patented features,
- 23 correct?
- 24 A. I agree.
- 25 O. Okay. And you've done no survey work or other

- 1 type of analysis to determine what drives sales of these
- 2 chips, right, sir?
- 3 A. That's correct.
- 4 Q. Thank you, sir.
- 5 MR. JONES: Your Honor, I pass the
- 6 witness.
- 7 THE COURT: All right. Redirect?
- 8 MR. CAMPBELL: Thank you, Your Honor.
- 9 Mr. Jones, can I borrow your exhibit?
- 10 MR. JONES: You sure can.
- If you lose it, you owe me \$2.50.
- MR. CAMPBELL: \$2.50. All right.
- 13 REDIRECT EXAMINATION
- 14 BY MR. CAMPBELL:
- 15 Q. \$2.50, Mr. Jones says I would owe him for
- 16 this. Let's say I don't lose it, and he sells me this
- 17 chip for \$2.50, what can I do with this?
- 18 A. Not much, unless you put it in something.
- 19 Q. Need to build a computer or a router, don't I?
- 20 A. That's correct.
- Q. I -- well, what -- well, if I just put this on
- 22 this table, take it home, what's it going to do for me?
- 23 A. Not much.
- 24 Q. \$2.50.
- 25 Remind me, when does the hypothetical

- 1 negotiation take place?
- 2 A. It would have occurred in 2007 when the
- 3 Defendants first started using the products that
- 4 infringe the patents.
- 5 Q. 2007.
- 6 And what did Intel sell an 802.11n chip for in
- 7 2007?
- 8 A. \$29.
- 9 Q. \$29?
- 10 A. Yes.
- 11 Q. Not \$2.50?
- 12 A. No.
- Q. HP, do they use some of Intel's chips?
- 14 A. Yes, they do.
- 15 Q. Okay. I want to go back to following the
- 16 money.
- 17 A. Uh-huh.
- 18 MR. CAMPBELL: Unfortunately, Your Honor,
- 19 to follow the money, we have to get into the
- 20 confidential information of the licenses. I apologize.
- 21 THE COURT: All right. We'll seal the
- 22 courtroom again. And if you're not covered by the
- 23 protective order that's been entered in this case, you
- 24 will need to leave the courtroom again during this
- 25 testimony.

1 (Pause.) 2 (Courtroom sealed.) (Sealed Portion No. 6 of the Trial 3 4 filed under separate cover.) 5 (Courtroom unsealed.) THE COURT: All right. Counsel, if you 6 7 would please approach. 8 (Bench conference.) 9 THE COURT: I have a question that's crossed out. I won't read it, but the one that's not 10 crossed out is: Not the chip hardware, but the software is the issue, correct? 13 MR. JONES: I don't think he knows that. 14 MR. CAMPBELL: It's more of a technical 15 question. THE COURT: Huh? 16 MR. CAMPBELL: It's more of a technical 17 18 question. He's not going to know the answer to that. 19 (Bench conference concluded.) 20 THE COURT: Ladies and Gentleman of the Jury, excuse -- let me excuse you for just a moment 21 22 while I visit with the witness about something. 23 COURT SECURITY OFFICER: All rise for the 24 jury. 25 (Jury out.)

- 1 THE COURT: Please be seated.
- 2 All right. There is a -- there are some
- 3 questions listed, but they are marked through, and then
- 4 there's a question that's asked at the end. And I'll
- 5 first read the questions that are marked through, and I
- 6 think it will perhaps give some context.
- 7 And the questions that are marked through
- 8 are as follows: I have a Samsung tablet with Wi-Fi.
- 9 Why not list it? And the other companies not listed.
- 10 TVs with Wi-Fi, question mark. Not the Intel chip, but
- 11 the technology Wi-Fi is 50 cents.
- 12 That's all marked through, so I don't
- 13 propose to ask any of that.
- 14 Then the question that they have not
- 15 marked through is: Not the chip hardware, but the
- 16 software is the issue, correct?
- 17 And that would be the question to the
- 18 witness.
- 19 And do you know the answer to that
- 20 question, first, or could you answer that question in a
- 21 meaningful way?
- 22 THE WITNESS: Well, what I could say
- 23 about that is, again, going back to the market rates.
- 24 So there's these -- in the real-world
- 25 negotiations they have these technical discussions, and

- 1 so the parties would have understood what the patents
- 2 relate to. And so that's what they were willing to pay
- 3 for, based on their understanding of where the
- 4 technology was embodied, in the source code or the chip.
- 5 THE COURT: Okay. All right. Do
- 6 Plaintiffs have an objection to the question?
- 7 MR. CAWLEY: No.
- 8 THE COURT: Does Defendant?
- 9 MR. JONES: Yeah, we do, Your Honor.
- No. 1, I don't think it answers the
- 11 question.
- No. 2, it's clearly outside the scope of
- 13 this particular witness's expertise.
- 14 And No. 3, you know, we get these reports
- 15 where experts, you know, give us their opinions. This
- 16 would be an opinion that's totally outside the scope of
- 17 his report and something we couldn't prepare rebuttal
- 18 for.
- 19 MR. CAWLEY: Your Honor, here's my one
- 20 person's view of what that question gets to. My opinion
- 21 is that it gets to a misunderstanding that the chip is
- 22 simply a bare piece of hardware that has no software in
- 23 it or associated with it; when, in fact, we all know
- 24 that there's firmware or -- or software in the chip.
- 25 And I think that this witness could

- 1 productively tell this -- tell the jurors the chip
- 2 includes both, and his opinion is based on both.
- 3 MR. JONES: Your Honor, could I speak to
- 4 that?
- 5 THE COURT: Yes, uh-huh.
- 6 MR. JONES: Your Honor, my point is this:
- 7 I think this question is going to be answered when we
- 8 have witnesses up there that testify about the products,
- 9 the chips, and how they work. It's clearly outside the
- 10 scope of this expert's knowledge and his opinions, and
- 11 for that reason should not be asked.
- 12 THE COURT: All right. Let me ask the
- 13 witness.
- 14 Do you -- tell me again -- if you would,
- 15 speak into the microphone, what your answer to that
- 16 question would be: Not the chip hardware, but the
- 17 software is the issue, correct?
- Do you feel that you can answer that
- 19 question? And if not, that's fine; but if you do, then
- 20 how?
- 21 THE WITNESS: So my response to that
- 22 would be while I'm not a technical person, I can't speak
- 23 directly to the software and the hardware aspect of it,
- 24 what we can say in the context of damages is through the
- 25 technical discussions, regardless of where it's

- 1 embodied, the market rates indicate the value of that,
- 2 whether it's in the source code or the chip.
- 3 MR. JONES: Your Honor, I think he just
- 4 said he didn't know the answer to the question.
- 5 No. 2, I would just point out that there
- 6 have been technical experts that testified on this very
- 7 issue.
- 8 THE COURT: All right. The Court will
- 9 overrule the objection.
- I -- what I want to do, I've -- we've
- 11 invited the jury to ask questions, and they're not
- 12 always going to artfully draft their question, but I
- 13 think they give enough of an indication and I think his
- 14 answer is consistent with -- with damages, as he
- 15 annunciated it. And you're correct, that you'll have
- 16 other witnesses that can expand on this later. But I'm
- 17 going to allow that jury question.
- 18 So bring the jury in, please.
- 19 MR. JONES: Thank you, Your Honor.
- 20 COURT SECURITY OFFICER: All rise for the
- 21 jury.
- 22 (Jury in.)
- THE COURT: All right. Please be seated.
- 24 All right. Mr. Bone, we have a question
- 25 for you from the jury, and the question is this:

- 1 Not the chip hardware, but the software
- 2 is the issue, correct?
- THE WITNESS: So -- so while I'm not a
- 4 technical expert, so I can't specifically address the
- 5 software versus the hardware issue in terms of where it
- 6 is; what I can tell you, from the con -- from the -- in
- 7 the discussion of damages, as we've heard before, there
- 8 are -- in the actual real-world negotiations, there were
- 9 technical discussions that addressed Ericsson's patents
- 10 and where they relate to the software and the chip. And
- 11 their understanding of where it was, that's what the
- 12 companies were willing to pay for, in terms of the
- 13 market rates.
- 14 THE COURT: All right. Thank you.
- 15 All right. Any follow-up questions from
- 16 the Plaintiffs?
- MR. CAMPBELL: No, Your Honor.
- 18 THE COURT: From the Defendants?
- 19 MR. JONES: Yes, just one, Your Honor.
- 20 THE COURT: All right.
- 21 FURTHER CROSS-EXAMINATION
- 22 BY MR. JONES:
- Q. When we first started your testimony, we
- 24 talked about the fact that you had listened to the
- 25 testimony of the Plaintiffs' liability expert in this

- 1 case, Dr. Nettles, right, sir?
- 2 A. Yes, sir.
- 3 Q. Okay. Thank you, sir.
- 4 And he said -- he said that it's the Wi-Fi
- 5 chips that are at issue in this case, right, sir?
- 6 A. That's my understanding.
- 7 Q. Thank you, sir.
- 8 MR. JONES: I pass the witness, Your
- 9 Honor.
- 10 THE COURT: All right. Any redirect?
- MR. CAMPBELL: No, Your Honor.
- 12 THE COURT: All right. Thank you. You
- 13 may step down, Mr. Bone.
- 14 All right. Who will Plaintiffs' next
- 15 witness be?
- MR. CAWLEY: Your Honor, at this time
- 17 we've got a few exhibit issues to finalize.
- 18 THE COURT: All right. You have some
- 19 exhibits you wish to -- and I apologize, I failed to ask
- 20 both parties this morning. So do you have an exhibit
- 21 list for today?
- MS. MOORE: Yes, Your Honor, we have a
- 23 pre-admit exhibit list for today. It's got about 10
- 24 items on it. The first six are agreed, and I don't
- 25 believe we have a position yet on the last four, which

```
1 are PX 562 through PX 565.
```

- 2 MR. DE VRIES: I was able to obtain
- 3 copies of these, and we have no objections to any of
- 4 those on that list.
- 5 THE COURT: All right. So the title of
- 6 that list is what?
- 7 MS. MOORE: Yes, Your Honor. It's
- 8 Plaintiffs' Pre-admitted Exhibit List for June 6th,
- 9 2013.
- 10 THE COURT: All right. That will be
- 11 marked as Plaintiffs' Exhibit List No. 4.
- 12 And are -- there are no objections; is
- 13 that correct?
- MR. DE VRIES: That's correct, Your
- 15 Honor.
- 16 THE COURT: All right. The exhibits on
- 17 that list are admitted.
- Do Defendants have a similar list?
- 19 MR. DE VRIES: We do, Your Honor. It's
- 20 entitled Defendants' List of Pre-admitted Exhibits for
- 21 June 6th, 2013.
- 22 THE COURT: All right. That will be
- 23 marked as Defendant's Exhibit List No. 5 -- excuse me,
- 24 No. 4.
- 25 Are there any objections to the exhibits

```
1 contained on that list?
```

- MS. MOORE: No, Your Honor.
- 3 THE COURT: All right. Those exhibits
- 4 are admitted.
- 5 All right. Who will Plaintiffs' next
- 6 witness be?
- 7 MR. CAWLEY: Your Honor, at this time the
- 8 Plaintiff Ericsson rests.
- 9 THE COURT: All right. Plaintiff rests.
- 10 All right. Who will Defendants' first
- 11 witness be?
- MR. VAN NEST: Excuse me, Your Honor. We
- 13 would like to speak briefly with the Court on motions.
- 14 THE COURT: All right.
- 15 (Bench conference.)
- 16 THE COURT: Speak up a little louder.
- 17 MR. VAN NEST: I'm sorry.
- 18 THE COURT: Speak in a normal, quiet
- 19 voice. If you whisper, she doesn't hear it; but if you
- 20 can just talk in a low regular voice.
- 21 MR. VAN NEST: This is about JMOLs.
- 22 THE COURT: Yeah. We can do that on a
- 23 break.
- 24 Any objection to that procedure on the
- 25 JMOLs?

1	MR.	STEVENSON:	No	objection.
---	-----	------------	----	------------

- THE COURT: We'll do them at the noon
- 3 break.
- 4 MR. VAN NEST: Thank you, Your Honor.
- 5 (End of bench conference.)
- 6 THE COURT: Who will Defendants' first
- 7 witness be?
- 8 MR. VAN NEST: Your Honor, Defendants
- 9 call Mr. James Johnson.
- 10 THE COURT: All right. Mr. Johnson.
- 11 MR. DAUCHOT: Your Honor, may we proceed?
- 12 THE COURT: Yes, you may.
- JAMES JOHNSON, DEFENDANTS' WITNESS,
- 14 PREVIOUSLY SWORN
- 15 DIRECT EXAMINATION
- 16 BY MR. DAUCHOT:
- 17 Q. Good morning.
- 18 A. Good morning.
- 19 Q. Please introduce yourself to the members of
- 20 the jury.
- 21 A. Hi, I'm Jim Johnson.
- Q. All right. Mr. Johnson, you were introduced
- 23 earlier as James. Is it James or Jim?
- 24 A. I prefer Jim.
- Q. All right, sir. Where do you work?

- 1 A. I work at Intel Corporation.
- Q. And how long have you worked at Intel?
- 3 A. Just over 29 years.
- 4 Q. All right. And we'll get into a bit more
- 5 detail, but just at a very high level, what is Intel or
- 6 who is Intel?
- 7 A. Intel's now the largest chip company in the
- 8 world.
- 9 Q. And when was the company founded?
- 10 A. It was founded in 1968.
- 11 Q. And where was it founded?
- 12 A. It was founded in a -- in an area of Santa
- 13 Clara, California, just south of San Francisco, if you
- 14 haven't been there.
- 15 Q. All right. And who started Intel? Who are
- 16 the founders?
- 17 A. Three men named Robert Noyce, Gordon Moore,
- 18 and Andy Grove.
- 19 Q. All right. What were their accomplishments
- 20 through Intel? Can you explain that to the jurors?
- 21 A. Well, I joined somewhat after -- after they
- 22 founded the company, but they were pretty fantastic.
- 23 They -- they had innovations and -- and
- 24 developed a semiconductor which we call chip in this --
- 25 in this case, but semiconductor products and

- 1 manufacturing processes that really revolutionized, in
- 2 my tenure at Intel, what the computer industry has
- 3 become. I mean, there wasn't a -- really a phrase
- 4 coined personal computer that many people knew, but now
- 5 we all have one.
- 6 Q. All right, sir. Have the founders of Intel
- 7 been honored in any way for their accomplishments?
- 8 A. Yes, they've -- they've been honored in -- in
- 9 many, many ways, nationally and internationally. I've
- 10 actually brought a couple of pictures just to kind of
- 11 personalize it, if I could.
- 12 Q. All right. And let's put up the first one
- 13 that you put together, Slide 1. I think it's --
- 14 MR. DAUCHOT: Your Honor, just for the
- 15 record, it's Defendants' Demonstrative 1.
- 16 THE COURT: All right.
- 17 Q. (By Mr. Dauchot) Here we go.
- 18 A. Yeah, so here's the picture. It's a slide of
- 19 three pictures actually. So on the left, you see Robert
- 20 Noyce, and so first you see him receiving one of the
- 21 national medals. One's for science, and one's for
- 22 technology -- I can't remember which order is which --
- 23 from Jimmy Carter.
- 24 And then on the lower left, you see him
- 25 receiving a similar award from Ronald Reagan. So

- 1 there's Robert Noyce.
- 2 And then on the right is Gordon Moore -- also
- 3 known for Moore's Law. He predicted over 30 or 40 years
- 4 ago what would happen to semiconductor manufacturing,
- 5 and he was right -- getting it from George Bush.
- 6 Q. All right. How about -- I think we leave one
- 7 of the inventors out, right?
- 8 A. Yes. On the next slide, if you don't mind
- 9 forwarding it. And this was in my tenure there. Andy
- 10 Grove, and we were -- we were quite pleased as a company
- 11 when he was awarded Man -- Time -- of the Year for his
- 12 innovation.
- 13 Q. Have you personally worked with any of these
- 14 individuals?
- 15 A. Andy was the hands-on President and CEO during
- 16 my tenure when he was leading the company, so I spent a
- 17 lot of time with him.
- 18 Q. All right, sir. And we'll get into a bit more
- 19 what you've -- you've done at Intel. But just from a --
- 20 from a big-picture standpoint, how many employees does
- 21 Intel have?
- 22 A. We have -- we have about 110,000 worldwide,
- 23 with over half here in the U.S.
- Q. All right, sir.
- 25 And just to give the jury a feel for what --

- 1 what Intel does or who it is, where in the United States
- 2 does Intel have facilities?
- 3 A. I -- I won't go through the -- I won't go
- 4 through the whole U.S., but the primary state -- some of
- 5 the primary states are Oregon, which is our largest
- 6 facility; California; and we have a big facility in
- 7 Arizona; we have a facility in New Mexico; and we have a
- 8 facility here in Texas, too.
- 9 Q. All right. So we're in Texas. Where in Texas
- 10 is the facility?
- 11 A. It's in Austin.
- 12 Q. All right. Just very briefly, what does Intel
- 13 do in Austin?
- 14 A. They make chips primarily for the tablet and
- 15 the SmartPhone devices.
- Q. And how many employees at that facility?
- 17 A. There's about a thousand.
- 18 Q. All right. And I just want to focus a bit on
- 19 Intel's relationship with some of the higher education
- 20 facilities that we have here in the states. Any
- 21 relationship with the University of Texas?
- 22 A. Yes. So every state where we have -- have
- 23 facilities, we tend to do this. And so I'll focus on
- 24 Austin where we'll -- in that thousand -- I said make,
- 25 they really design the products, not make them. And we

- 1 hire about a hundred engineers -- hundred interns,
- 2 largely engineers, largely from the University of Texas,
- 3 not only.
- 4 And we kind of do that in each state we live.
- 5 We try and hire local interns because it's -- it's good
- 6 for them because they get experience, but it's great for
- 7 Intel because we have a pipeline of new engineers coming
- 8 into the company.
- 9 Q. Now, does Intel exclusively focus on higher
- 10 education?
- 11 A. No. We have local programs and national
- 12 programs. Kindergarten through 12 is -- is -- is one.
- 13 Q. And tell us a little bit about that.
- 14 A. Yeah, well, I'll -- I'll just stay with the
- 15 local theme since we're here, but it applies nationally.
- 16 We have something called the Intel Teach
- 17 Program. And it's a 40-hour -- 40-hour curriculum that
- 18 we offer teachers in K through 12 education, and we give
- 19 them computer skills and training. And when they
- 20 complete that 40 hours, then we help them take that back
- 21 into their classroom and curriculum. And I mention that
- 22 one, because we've had the highest participation rate of
- 23 any state here in Texas, with over 28,000 teachers that
- 24 have been through that program.
- 25 O. All right. Now, any school here in Texas,

- 1 particularly near and dear to your heart?
- 2 A. Well, recently, yes, my son just graduated
- 3 from the Ranch Management Program at TCU, Texas
- 4 Christian in Ft. Worth.
- 5 Q. All right, sir. How many kids do you have?
- 6 A. I'm blessed with three sons.
- 7 Q. And you're married, sir?
- 8 A. Yes, I -- yes, I am. I met my wife at Intel a
- 9 couple of years in, and we've been married ever since.
- 10 Q. I take it that wasn't the reason you chose to
- 11 join Intel?
- 12 A. I was there before her.
- 13 Q. All right, sir. And explain to our jurors why
- 14 you decided to join Intel.
- 15 A. I was fortunate enough, when I was getting out
- 16 of college, to have a few other offers. And the last
- 17 company I interviewed with was with a company named
- 18 Intel. It was like one-fiftieth the size it is now in
- 19 terms of revenue. And what impressed me with that
- 20 company, they gave me the most grueling interview I'd
- 21 ever experienced, 10 hours, 30-minute sections and --
- 22 Q. You haven't had your cross-examination yet, so
- 23 we'll see if it's the most grueling.
- A. Second most, maybe.
- 25 But what I was impressed with is their

- 1 discipline and organization. You could really tell it
- 2 was a company going somewhere; focused on innovation and
- 3 the customer.
- 4 Q. All right. Mr. Johnson, what is it that you
- 5 do at Intel today?
- 6 A. I'm a vice president of the Intel Architecture
- 7 Group.
- 8 Q. And what is the Architecture Group?
- 9 A. The Intel Architecture Group is Intel's
- 10 largest business, and it's comprised of primarily
- 11 computer chips and communications chips; not solely, but
- 12 that's how it characterizes its -- its biggest
- 13 businesses.
- 14 Q. All right. And I think you told us a little
- 15 bit about the computer chips earlier. Let's -- let's
- 16 focus on the communication chips. What are those?
- 17 A. The communications chips are largely what
- 18 we've been talking about today. There's communications
- 19 chips for wired communication, like many of these
- 20 computers that the -- is wired up in the courtroom uses,
- 21 something called Ethernet. We haven't been talking
- 22 about. And then there's a communications chip for
- 23 wireless called Wi-Fi, and there are many others that
- 24 have been mentioned by other testifiers.
- Q. All right. As between the two chips, the

- 1 computer chips that actually run the computers, if you
- 2 will, and the communication chips, which type of chip is
- 3 your work focused on at Intel?
- 4 A. Primarily it's been communications chips for
- 5 computers.
- 6 Q. All right. And explain to us how you were
- 7 involved in the communication chip site?
- 8 A. In -- prior to 2002, I was involved on the
- 9 wired communications chip side; but in 2002 through late
- 10 2005, I was the general manager of our wireless
- 11 networking group, solely focused on Wi-Fi products.
- 12 Q. And, generally speaking, what did that group
- 13 do, sir?
- 14 A. That group really had two fundamental
- 15 responsibilities. At the highest level was a product
- 16 group, so we delivered products like we've been holding
- 17 up here. And, really, one part of my job was working
- 18 with the business side to define what we needed from the
- 19 standard and what type of product feature sets we needed
- 20 when.
- 21 And then I led the engineering side that would
- 22 develop the hardware and software to deliver those
- 23 products. They worked for me through my management
- 24 team.
- 25 Q. All right, sir. Are you an electrical

- 1 engineer?
- 2 A. No, sir, I'm not.
- 3 Q. All right. And so as far as the -- the detail
- 4 behind the chips and the -- you know, the brains on the
- 5 chip and that sort of stuff, should we look to you for
- 6 that information, sir?
- 7 A. I depend on my team, as we should all depend
- 8 on the technical team here.
- 9 Q. All right, sir.
- Now, can you give us a sense of what Intel was
- 11 trying to accomplish through its work in Wi-Fi?
- 12 A. Yes. So the -- the big thing that was going
- 13 on, if I just step back one step, is most of us had been
- 14 using desktop computers. And a new thing was happening
- 15 called the notebook computer. And we were coming to the
- 16 conclusion that we needed another way to hook up to
- 17 local area networks, other than carrying a wire around,
- 18 which we literally did. And so we started to focus on
- 19 Wi-Fi as an alternative to hook up these notebooks.
- 20 Q. All right. Now, was -- you mentioned Wi-Fi as
- 21 a wireless communication. Was that the only type of
- 22 wireless around that day?
- 23 A. Oh, no. There -- there were other
- 24 alternatives. The primary alternative that -- that was
- 25 being considered or was being used were cellular cards,

- 1 usually attached to the outside of a -- a notebook, but
- 2 some were trying to put them inside a notebook, too,
- 3 some -- some of our customers.
- 4 Q. All right. Now, if you had cellular wireless
- 5 communication, why Wi-Fi?
- 6 A. We really had two things we wanted to
- 7 accomplish that was different -- different. Is we
- 8 wanted to get on a trajectory of very low cost, so we
- 9 could have high -- high -- high attach rates of -- of
- 10 wireless to a notebook, and we wanted universal access,
- 11 so wherever you went for that network, you could attach.
- 12 So we called it interoperability. Here, we
- 13 wanted every Wi-Fi network to be interoperable.
- 14 Q. And when you speak about universal access, can
- 15 you explain to the jurors what that -- what that would
- 16 mean to them?
- 17 A. Yes. So I guess I'll -- I'll -- what it means
- 18 for me, especially being here, is I can go to a
- 19 Starbucks coffee shop; and if I see Wi-Fi advertised and
- 20 I open my notebook, I can connect to that Wi-Fi. I
- 21 don't care whose chip or whose router -- now that we all
- 22 know what routers are -- in Starbucks.
- Or actually, I go to Einstein Bagels for my
- 24 breakfast in the morning. They have free Wi-Fi. I
- 25 don't know whose Wi-Fi's chip. I don't know who --

- 1 whose Wi-Fi system, but it just works.
- 2 Q. All right, sir. What was -- can you explain
- 3 what -- what Intel's ultimate goal was, at least when
- 4 you were there, with respect to the Wi-Fi -- the Wi-Fi
- 5 chips?
- 6 A. Well, a handful of us were trying to
- 7 communicate what we were trying to accomplish, so we
- 8 came up with something we coined, the five-minute rule.
- 9 Wasn't a marketing campaign or anything. It
- 10 was just something we were trying to accomplish. And
- 11 the five-minute rule is simply if you're walking in a
- 12 city, we wanted Wi-Fi to be something that you could
- 13 walk five minutes and get connected.
- 14 Or if you're in a suburb like a few blocks out
- 15 of this city, within five minutes you could drive to a
- 16 coffee shop or a diner and get a Wi-Fi connection.
- 17 Q. Now, Dr. Nettles, yesterday in his testimony,
- 18 testified about Wi-Fi being available to our -- to our
- 19 soldiers in Afghanistan. Do you remember that
- 20 testimony?
- 21 A. Yes, I do, sir.
- Q. Do you have any familiarity with that, sir?
- 23 A. Some good and some bad.
- Q. All right, sir. Is -- does the five-minute
- 25 rule apply out there?

- 1 A. Not quite.
- Q. How do you know that?
- 3 A. I know that because my son served -- my oldest
- 4 son served in Afghanistan, and I had no connection. If
- 5 he was on a major base, which we couldn't get Wi-Fi
- 6 connections in Afghanistan during his tenure a few years
- 7 ago, it didn't work. The only way I could communicate
- 8 with him was through satellite, so we still have a lot
- 9 of work left to do.
- 10 Q. Now, who is the person at Intel who decided to
- 11 place the Wi-Fi technology on the Intel chips?
- 12 A. As the general manager of the group, it was my
- 13 responsibility.
- 14 Q. All right, sir.
- 15 What I'd like to do is focus a little bit on
- 16 the chip. We've heard quite a bit about it, and I think
- 17 that Mr. Jones was referring to it.
- 18 MR. DAUCHOT: And, Your Honor, the chip
- 19 has been marked as Exhibit 528. It's on the exhibit
- 20 list, and with the Court's permission, could I
- 21 distribute that chip to the members of the jury so they
- 22 could just hold it in their hands?
- THE COURT: Excuse me?
- MR. DAUCHOT: Would it be okay if I have
- 25 the Court's permission to distribute the chip to the

- 1 jurors so they can hold it in their hands?
- THE COURT: Yes, you may.
- 3 MR. DAUCHOT: All right. Thanks.
- 4 I'm going to take two out. You can pass
- 5 it down.
- 6 THE COURT: I'll just caution the jury,
- 7 please don't eat any of those chips.
- 8 [Laughter]
- 9 MR. VAN NEST: That's the ultimate free
- 10 Wi-Fi.
- 11 Q. (By Mr. Dauchot) Here, Mr. Johnson, I'll hand
- 12 you a copy.
- 13 A. Yeah.
- MR. DAUCHOT: I think I have an extra
- 15 copy for the Court.
- 16 Your Honor, are you interested in having
- 17 one or --
- 18 THE COURT: I'm fine. Thank you.
- 19 A. Yes, sir --
- 20 Q. (By Mr. Dauchot) All right. Hold on. Let's
- 21 make sure everyone has them.
- 22 All right, sir. So we have distributed
- 23 Exhibit 528 -- or copies of it to the Members of the
- 24 Jury. And you have one in your hands.
- What are we looking at?

- 1 A. Well, so -- just so we're all on the same
- 2 orientation, if you could put it so the little gold edge
- 3 is facing down, and I'll start at the top.
- 4 If you go to the very top, you're going to see
- 5 two little round buttons or little round circles.
- 6 That's where the antennas from the notebook connect, so
- 7 they're often in the screen. And then the wires have to
- 8 come through the hinge and they hook it up to those
- 9 round buttons. That's how you get the signal into the
- 10 notebook.
- 11 And then the center of this, the big black --
- 12 big black component, that's the chip that Intel designs,
- 13 and is where the majority of the engineering goes into.
- 14 Q. Now, Mr. Johnson, if I could interrupt you one
- 15 second.
- There's a question from the jurors on the
- 17 question of where of the -- if the software is actually
- 18 on the chip. And if you could just explain that to us.
- 19 A. Yeah. And so there's -- there's many types of
- 20 software, but there's really, really critical software
- 21 that we write that sits on the chip.
- Q. And where is that on the chip, as the jurors
- 23 are looking at it?
- 24 A. Oh, it is inside the chip, and there's a
- 25 portion of the chip that's memory. Just like our brain

- 1 has memory, there's a little bit of memory on the chip
- 2 so the software can sit inside that.
- 3 Q. All right. And you were going to explain the
- 4 black center?
- 5 A. Yeah, so the black center is how we manifest
- 6 our product. That's -- that's the core of the Wi-Fi
- 7 product that we sell.
- 8 However, to put it in -- to put it into a --
- 9 Q. You just need to back away from --
- 10 A. I'm sorry. I'm sorry. Can you guys hear me
- 11 okay?
- 12 Okay. So -- so then the reason we put on this
- 13 green -- I'll call it a green carrier or a module -- and
- 14 now if you look at the very bottom, you see these
- 15 gold -- we call them gold fingers. Those snap into a
- 16 socket on the board of a notebook or tablet.
- 17 And so there's two reasons for that. Reason 1
- 18 is these computer OEMs we've been talking about,
- 19 unfortunately don't only -- only want to buy from one
- 20 supplier. They want a choice from several suppliers,
- 21 and that's how they get best pricing and best features.
- 22 And then the second thing is the standards are
- 23 evolving, and they may choose to put a different
- 24 versions of the standard in at different times,
- 25 especially during transitions. So that's why it's on a

- 1 module.
- Q. All right. And just to give the jurors a
- 3 sense -- I mean, so these chips wind up on the circuitry
- 4 of computers.
- 5 And I remember during opening statement -- or
- 6 I'm sorry -- during voir dire, I think counsel for
- 7 Ericsson proposed to the jury, you go to a store, and
- 8 you get a laptop with a chip, and you get a laptop
- 9 without a chip, which one would be more appealing to
- 10 you.
- 11 A. Yes.
- 12 Q. Do you remember that line of questioning?
- 13 A. Yes, sir.
- 14 Q. Did that question strike you as odd at all?
- 15 A. Yes, because --
- 16 Q. Why so?
- 17 A. Because if not every, virtually every notebook
- 18 has Wi-Fi. People don't buy notebooks without Wi-Fi
- 19 anymore.
- Q. All right. And why is that?
- 21 A. Because it's at extremely low cost, so you can
- 22 have -- basically, the computer OEMs don't even think
- 23 about including it anymore.
- 24 And then, secondly, for all of us, if it says
- 25 Wi-Fi, you can connect. So you don't have to know it's

- 1 a Wi-Fi from Company A or a Wi-Fi from Company B. If
- 2 it's Wi-Fi, it's Wi-Fi. So you can just use it.
- 3 Those are the two fundamental reasons in my view.
- 4 Q. All right. Now, Mr. Johnson, you introduced
- 5 us to the notion of what Intel, and for that matter,
- 6 other chip makers were trying to accomplish, and this is
- 7 the low-cost interoperability.
- 8 What did it take to achieve that?
- 9 A. It takes really -- I guess I would summarize
- 10 it in two things, is we, as a company, have to
- 11 independently design and innovate what we want to
- 12 accomplish in Wi-Fi.
- So when we're going from this generation to
- 14 the next, it takes some of our best engineers'
- 15 hard-working innovation to create that next technology
- 16 of Wi-Fi.
- 17 Q. And what else does it take?
- 18 A. The second thing, which is very critical, is
- 19 they have a process -- we've been calling it IEEE. They
- 20 are members of a standards body where they can go
- 21 together to share their ideas and innovations with the
- 22 other engineers from other companies to come up and
- 23 conclude an interoperable standard for the next version.
- Q. All right. How much has Intel spent on R&D
- 25 just -- just for the Wi-Fi part?

- 1 A. Yes. So --
- Q. Not total, because we've heard total R&D
- 3 numbers from Ericsson, and I just want to focus strictly
- 4 on the -- on the Wi-Fi.
- 5 A. Yeah. So for the group I manage and then
- 6 continued on after me, it's approaching \$2 billion --
- 7 Q. All right.
- 8 A. -- for R&D.
- 9 Q. Okay. Now, how many engineers does Intel have
- 10 working or has had -- has Intel had working on Wi-Fi
- 11 over the years?
- 12 A. Well, under -- under my watch, we were at
- 13 about 650 engineers plus or minus 25, based on when you
- 14 would have looked at the group.
- 15 Q. Now has Intel been awarded patents for the
- 16 tech -- for the Wi-Fi technologies that it has
- 17 developed?
- 18 A. Yes. We've had -- we have patents for Wi-Fi.
- 19 Q. All right. Mr. Johnson, I want to focus a
- 20 little bit on the second prong of it.
- 21 So you have the -- the innovation that happens
- 22 inside the shop, and then you mentioned the
- 23 collaboration.
- 24 Can we focus on that? Just generally, what's
- 25 the process? Because we're going to hear more from --

- 1 from others as well. But just very generally, high
- 2 level.
- 3 A. I'll stay at the general level because there's
- 4 experts coming that live this day to day.
- 5 But they're -- they're -- IEEE has a great
- 6 process, with a lot of discipline, on how to gather
- 7 people's inputs; people's inputs being engineers from
- 8 each of the companies.
- 9 And then they have a process for making
- 10 selections down to a recommendation that eventually they
- 11 all ratify as the standard. And so everyone has to
- 12 listen to each other's ideas and then compromise.
- 13 Q. All right. So what do we -- what we have on
- 14 the one hand is, we have the in-house innovation -- and
- 15 against your competitors, right?
- 16 A. Yes. We are competitors at the end of the
- 17 day.
- 18 Q. And then on the other hand, you have this
- 19 collaborative step that's required to achieve the
- 20 low-cost interoperability.
- 21 Can you generally describe for the jurors how
- 22 those two competing interests get harmonized? How do
- 23 you -- how do those competing interests get resolved, at
- 24 least from your experience?
- 25 A. From my experience, I guess I would say it's a

- 1 balanced approach. You -- you absolutely want your
- 2 ideas to be accepted because then you might have a
- 3 little bit of a lead on the next product but not a
- 4 lot -- not a big lead, but a little bit of a lead.
- 5 And so what typically happens is, these things
- 6 start coming together. We start having some log jams.
- 7 And so let's say the chipset companies can't quite agree
- 8 on the approach to take, but then we could escalate it
- 9 to me, and my counterparts at, say, Atheros, or someone
- 10 like that, and we would talk and say: Hey, we've got to
- 11 resolve the log jam.
- 12 Or an equipment manufacturer may want their
- 13 proprietary features that only they support in our
- 14 components. And we would have to explain to them, no,
- 15 we're an open standard; we collaborate.
- So I guess at the end -- I'm going too long.
- 17 Q. No, no, no. That's all right.
- 18 A. I guess my summary is, it's tough for
- 19 engineers to give up their ideas, but we always have to
- 20 come back to interoperability trumps self-interest.
- Q. All right, sir. I want to shift back to the
- 22 standard-setting groups.
- 23 And did Intel have any formal leadership roles
- 24 in those standard-setting organizations, any particular
- 25 802.11, the stuff you worked on?

- 1 A. Yeah, I'll focus on 802.11, or, again, I'll
- 2 state general.
- 3 You know, there are chairmanships of
- 4 standards. There are authors of specific parts of the
- 5 standards. There's -- people read and ratify those
- 6 parts. And then there's people that agree to adopt
- 7 them.
- 8 And so Intel had several different leadership
- 9 positions throughout the history of 802.11n. And, in
- 10 fact, we have one of those folks that have been
- 11 extremely involved coming here to testify this week.
- 12 Q. Who's that?
- 13 A. This is Duncan Kitchin.
- 14 Q. All right. There was a little bit of
- 15 discussion over the price of Wi-Fi, and I think that was
- 16 the unsealed portion, so I don't know if you were seated
- 17 here when that was discussed, the price of Wi-Fi chips
- 18 dropping.
- 19 A. Yes, I did. I heard that.
- 20 Q. Can you -- do you have any experience with
- 21 that? First from the business perspective.
- 22 A. Yeah. I'll give -- I'll just give you the
- 23 experience I had when I was running the Wi-Fi group.
- In 2002, before we launched the first Wi-Fi
- 25 product with our chip -- and these are general. I don't

- 1 have the specific. But the general attach rate to
- 2 notebooks by computer manufacturers of Wi-Fi was
- 3 20 percent or less, meaning if they shipped a hundred
- 4 computers, only 20 would go with Wi-Fi.
- 5 And by the time I left, you know, to my next
- 6 job in late '05, the attach rates were growing like
- 7 60 or 70 percent, if I remember the ballpark number
- 8 right.
- 9 Q. And when -- when you say attach rates, what is
- 10 that?
- 11 A. That means that -- can you -- back to the
- 12 question, do you buy a notebook with Wi-Fi or without
- 13 Wi-Fi? When I say attach, it means Wi-Fi is in there.
- 14 So two out of ten notebooks when I started,
- 15 approaching six or seven, and I would say now, if it's
- 16 not a hundred percent, it's a virtual -- virtually a
- 17 hundred percent as the prices -- as and because the
- 18 prices have dropped about tenfold.
- 19 Q. And you started back in 2000, you were saying?
- 20 A. Yeah. 2002 is when I focused solely on Wi-Fi.
- Q. All right, sir. Just to conclude here, how
- 22 would you describe the success or lack of it -- I think
- 23 I know where you stand on it -- but of the 802.11 Wi-Fi
- 24 standard?
- 25 A. It's on one hand and the other.

- On one hand, it's exceeded, at least, what my
- 2 expectations were when we started the Wi-Fi project.
- 3 But on the other hand, there's a lot of people
- 4 in the world yet that don't have notebook computers.
- 5 They can't afford notebook computers. So we must keep
- 6 innovating and delivering more capability for lower
- 7 price.
- 8 Q. All right. Thank you, sir.
- 9 A. You're welcome.
- 10 MR. DAUCHOT: Your Honor, that's all I
- 11 have on direct.
- 12 THE COURT: All right.
- Cross-examination.
- MR. CAWLEY: Thank you, Your Honor.
- 15 CROSS-EXAMINATION
- 16 BY MR. CAWLEY:
- 17 Q. Good morning, Mr. Johnson.
- 18 A. Good morning, Mr. Cawley.
- 19 Q. You know, I hope this cross-examination won't
- 20 be grueling. I guess I can't guarantee you that, but I
- 21 can guarantee you it won't last 10 hours, if that's any
- 22 reassurance.
- 23 A. Thanks.
- Q. Now, let's -- let's start our -- our
- 25 discussion at Einstein's Bagel Shop. You say you get

- 1 free Wi-Fi there, right?
- 2 A. Yes, I did.
- 3 Q. And I think you also told us that when you
- 4 take your laptop or maybe you turn on your smartphone
- 5 and you're connecting to that free Wi-Fi by your device,
- 6 you don't even know whose chip is actually managing that
- 7 Wi-Fi within the router, do you?
- 8 A. Correct.
- 9 Q. You don't really care. I mean, I guess you
- 10 care, or you hope it's Intel's chip; but in terms of
- 11 being able to get connected, you don't care, right?
- 12 A. Correct.
- 13 Q. And that's because these devices are
- 14 interoperable. You're familiar with that word, aren't
- 15 you?
- 16 A. Yes.
- 17 Q. And the interoperability that lets you connect
- 18 your device to any Wi-Fi router in Einstein's Bagel or
- 19 somewhere else is all due to the fact that those devices
- 20 comply with a standard.
- 21 Do you agree with that?
- A. Agree.
- 23 Q. In this case, the standard is some -- some
- 24 flavor of 802.11, right?
- 25 A. Right.

- 1 Q. And Intel, in order to be interoperable, must
- 2 make its products compliant with that standard, correct?
- 3 A. Yes.
- 4 Q. So wouldn't you agree that if someone has
- 5 intellectual property, a patent, that is necessary to
- 6 practice a standard, that someone who wants to make an
- 7 interoperable product is going to need a license for
- 8 that intellectual property?
- 9 A. They -- they need to have an agreement that
- 10 they can use it for sure. I'm not -- I'm not on license
- 11 expert, so I'm hesitating --
- 12 Q. Okay.
- 13 A. -- not to use the word license. But, yeah, we
- 14 have to -- we have to, through the standard, agree that
- 15 we can use each other's technology.
- 16 Q. And if there is a patent that is necessary to
- 17 practice the standard, one way or another, whether -- I
- 18 guess you're suggesting them not give it to you for
- 19 free; but if they expect to be paid for the use of their
- 20 patent, then someone who -- who wants to practice the
- 21 standard is going to need to come to an agreement with
- 22 them, correct?
- 23 A. I -- I don't -- that's not any experience. I
- 24 don't totally agree with that.
- 25 O. Well, you do agree that there may be patents

- 1 that are essential to standards, including 802.11,
- 2 right?
- 3 A. Absolutely.
- Q. Okay. And you do agree that it is essential
- 5 for your business that you be able to make a product
- 6 that is compliant with that standard?
- 7 A. I agree.
- 8 Q. All right, sir. Now, you pointed out to us, I
- 9 think, an interesting history that back in 2002 -- I
- 10 think was the first year you used -- what percentage of
- 11 inclusion was there of 802.11?
- 12 A. Into notebooks?
- 13 Q. Yes, sir.
- 14 A. As I recall, less than 20 percent.
- 15 Q. So less than 20 percent.
- So you would agree with me that 10, 11 years
- 17 ago, Wi-Fi was something that people made choices about.
- 18 Do I want to buy a laptop with Wi-Fi or do I not?
- 19 A. Yes.
- 20 Q. And then now, you -- you pointed out to us,
- 21 Wi-Fi is so common and so readily available that people
- 22 pretty well just assume that their notebook computer is
- 23 going to have Wi-Fi in it.
- 24 A. Yes.
- Q. You'd agree with that?

- 1 A. I agree.
- Q. And you would agree that, in part, that's
- 3 because of the popularity of Wi-Fi and because it's
- 4 something that people want.
- 5 A. In part.
- Q. Well, there's a lot of things, for example,
- 7 that were common in computers in 2002 that have pretty
- 8 well disappeared out of notebooks. Wouldn't you agree
- 9 with that?
- 10 A. I'm not sure.
- 11 Q. Well, certain kind of drives; floppy disk
- 12 drive -- do you have a floppy disk drive in your
- 13 notebook computer?
- 14 A. I don't think I ever did, but no, I don't.
- 15 Q. All right. But those are gone, right?
- 16 A. They are as far as --
- 17 Q. Once upon a time, virtually every notebook
- 18 computer came with that kind of drive, didn't they?
- 19 A. I -- I never had a floppy drive on my
- 20 notebook.
- 21 Q. Okay. You know what a PC MCIA connection slot
- 22 is, don't you?
- 23 A. Yes, I do.
- Q. That was a technology that was certainly
- 25 around and pretty popular in 2002.

- 1 A. Yeah, I agree.
- Q. Don't see many of those anymore, do you?
- 3 A. No, I don't.
- 4 Q. But you do see 802.11, you've told us, not
- 5 only in some laptops, but in virtually all of them.
- 6 A. Yes.
- 7 Q. You've told us also about the -- at least
- 8 something about the pricing of your chip. This thing
- 9 that we heard cost \$2.50 today, more or less, and is it
- 10 fair to say it cost a lot more than that only a few
- 11 years ago, fair?
- 12 A. It cost more than that a few years ago. I
- 13 don't have the exact number, but, yeah, I agree with
- 14 that.
- 15 Q. Okay. But what goes into the pricing of this
- 16 chip? Are you -- are you -- are you now or have you
- 17 been in some ways responsible for helping to price these
- 18 chips?
- 19 A. During my tenure as the GM, I did.
- 20 Q. Okay. So what kind of factors did you have to
- 21 consideration (sic) in arriving at the price Intel was
- 22 going to charge for chips like this?
- 23 A. The -- the feature set, the performance, the
- 24 cost of the product, things like that.
- Q. Okay. Let's start with that last one.

- 1 A. Okay.
- Q. The cost of the product. What kind of things
- 3 are included in the cost of a product like this?
- 4 A. Well, the things you have to consider in
- 5 pricing is how much it costs to develop it and then how
- 6 much the chip costs and how much the components around
- 7 it to make the chip costs and the software we developed
- 8 on top of it, things like that.
- 9 Q. How about the cost of any rights you have to
- 10 have to be able to practice the technology?
- 11 A. Yes. If we had -- if we had had to license
- 12 technology, it would be part of the cost of that.
- 13 Q. So if this jury believes that Intel is using
- 14 Ericsson's patents without permission and without paying
- 15 anything for them, you haven't included that in the
- 16 cost, have you?
- 17 A. If -- if the Court finds that there's some
- 18 royalties that we haven't accounted for, yeah, that
- 19 needs to be included in the cost.
- Q. But right now it's not, is it?
- 21 A. If there's -- if there's not a paid-for
- 22 license for -- it's not included, correct.
- 23 Q. And Intel today is able to offer this chip for
- 24 \$2.50, in part, because it pays nothing for the right to
- 25 use Ericsson's patents, correct?

- 1 A. We -- we don't -- we don't pay for patents to
- 2 Ericsson. I agree.
- Q. Okay. You told us about Intel, your company,
- 4 and its locations. I was reading a little bit about
- 5 Intel last night, and I -- I happened to notice that
- 6 within the last fairly recent time, Intel spent
- 7 \$2 billion to open a facility in India; is that right?
- 8 A. I -- I'm not familiar with that facility.
- 9 Q. You don't know if Intel has a facility in
- 10 India in Bangalore?
- 11 A. Oh, I know we have a facility in Bangalore.
- 12 I'm just not aware of the 2-billion-dollar announcement.
- 13 Q. It cost \$2 billion.
- 14 How many people work there?
- 15 A. I'm not sure.
- 16 Q. Have you ever worked with any of them?
- 17 A. A handful, yes.
- 18 Q. Have you been there?
- 19 A. No, I have not.
- 20 Q. So you were able to work with -- I assume,
- 21 were they engineers?
- 22 A. Yes.
- Q. With engineers, with technical people in
- 24 India, even though you didn't go there yourself
- 25 personally?

- 1 A. Yes.
- Q. Okay. Didn't have any problem with that?
- 3 A. It's never as good as face to face, but we
- 4 made it work.
- 5 Q. Okay. You made it work.
- And you'd agree with me, wouldn't you, that
- 7 over the past decade or more, it's become pretty common
- 8 for technology companies and others in the high-tech
- 9 space to have a lot of interaction with technicians in
- 10 India.
- 11 A. I -- I guess, yeah.
- 12 Q. Well, you don't -- you don't find it unusual
- 13 that many high-tech companies have major facilities in
- 14 India, do you?
- 15 A. No.
- 16 Q. You don't think there's anything unusual about
- 17 hearing that a person involved in the high-tech field is
- 18 dealing with people in India.
- 19 A. No, I don't.
- 20 Q. Okay. When did you first read the Ericsson
- 21 patents in this case, Mr. Johnson?
- 22 A. End of last week.
- Q. End of last week?
- A. Yes, sir.
- 25 Q. You had never read them before then?

- 1 A. No, I haven't.
- 2 Q. I see.
- 3 Well, you're -- you're the Intel
- 4 representative who's sitting here in the courtroom
- 5 through the whole trial, right?
- 6 A. Yes, I am.
- 7 Q. When were you first asked to be the person
- 8 that did that?
- 9 A. The -- the discussion started about a year ago
- 10 as me potentially being that person.
- 11 Q. Okay. Now, let me ask you a few questions
- 12 about Intel and the IEEE.
- 13 Have you ever attended any IEEE
- 14 standard-setting meetings?
- 15 A. Personally, no.
- 16 Q. Okay. Well, I won't ask you about that.
- 17 You're aware, though, aren't you, that just
- 18 like Ericsson did -- not just like, I shouldn't say
- 19 that; but as Ericsson did, Intel has made some
- 20 assurances to the IEEE about Intel's patents relating to
- 21 802.11?
- 22 A. Yes, I'm generally aware.
- Q. Okay. Well, let's get a little more specific
- 24 about it.
- 25 MR. CAWLEY: Let's look at Plaintiffs'

- 1 Exhibit 507. Let's go ahead and enlarge, say, the first
- 2 half of this document.
- 3 Q. (By Mr. Cawley) You see that this is a
- 4 situation to the secretary of the IEEE?
- 5 A. Yes.
- 6 Q. And it comes from Intel?
- 7 A. Yes, sir.
- 8 Q. Okay. Now, if we look at the bottom part of
- 9 the document --
- 10 MR. CAWLEY: If you'll -- if you'll
- 11 enlarge -- there we go.
- 12 Q. (By Mr. Cawley) And you see from the four
- 13 boxes there, four different choices, that this sets out
- 14 what Intel's position is about its 802.11 patents to the
- 15 IEEE?
- 16 A. Yes, I do.
- 17 Q. And you see the first choice was, under No. 1,
- 18 that the patent holder -- that's Intel -- is prepared to
- 19 grant a free license.
- You see that?
- 21 A. Yes.
- Q. But that's not checked, is it?
- 23 A. No, sir.
- Q. And then there's some other choices, 3 and 4,
- 25 either that Intel is not aware of any patents -- that's

- 1 No. 4 -- and No. 3, that it's unwilling to grant
- 2 licenses.
- 3 You see that?
- 4 A. Yes, sir.
- 5 Q. That's not checked either.
- 6 A. Correct.
- 7 Q. What is checked is No. 2 that says that Intel
- 8 is prepared to grant a license on a worldwide
- 9 non-discriminatory basis among reasonable terms and
- 10 conditions; accurate?
- 11 A. Yes, sir.
- 12 Q. So Intel itself has told the IEEE not that it
- 13 will give away its 802.11 patents for free; but that it
- 14 will be prepared to license them on a reasonable basis.
- Do you agree with that?
- 16 A. I agree.
- 17 Q. Okay. And they also agreed to do it on a
- 18 non-discriminatory. Do you understand what that means?
- 19 A. Yes. And I learned a lot about it this week,
- 20 too.
- Q. Okay. But in shorthand, it means no special
- 22 deals.
- 23 A. Yes, sir. And I learned a lot about that the
- 24 last couple of days.
- Q. Okay. Why do you understand that's important?

- 1 A. So if you -- I guess I'd just say, so if you
- 2 develop for the standard, everyone can use that
- 3 standard.
- 4 Q. And they can all be on the same playing
- 5 ground, right?
- 6 A. I don't totally agree with that, because this
- 7 isn't my area of expertise. I'd really defer to my
- 8 technical team on the specifics of these terms.
- 9 Q. Okay. Well, let me just ask you about your
- 10 understanding and not the -- not the terms themselves.
- 11 You understand that part of the basis for
- 12 people making a commitment like this through a
- 13 standard-setting body is that people who are considering
- 14 adopting the technology will know, first of all, they
- 15 can get a license, right?
- 16 A. Sure. Yeah.
- 17 Q. Not going to discover that they've been
- 18 blocked somehow.
- 19 Okay. So they can get a license, and that it
- 20 will be on reasonable terms, right?
- 21 A. Are you asking, based on my experience with
- 22 licensing, or actually building products and IEEE?
- Q. I'm asking you your understanding of why these
- 24 agreements like this are important.
- 25 A. Okay. I'm -- I'm not -- I'm not technically

- 1 deep on these agreements, so --
- Q. Okay.
- 3 A. -- we can keep going, but I just don't want
- 4 set any expectation that --
- 5 Q. Do you have any understanding, just in
- 6 general, about why people who are considering building a
- 7 product compliant with the standard, find it important
- 8 that they can get a license without being discriminated
- 9 against?
- 10 A. Sure.
- 11 Q. What's your understanding?
- 12 A. So when we're building a product per the
- 13 standard that we've all agreed to, we're not going to
- 14 have a -- we're not going to have a lost of costs come
- 15 in later and then have some people have to pay the cost
- 16 and others not pay. That's just my --
- 17 Q. Right.
- 18 A. -- that's my experience --
- 19 Q. Sure.
- 20 A. -- building products.
- Q. Okay. It's logical. Common sense, isn't it?
- 22 A. I don't know.
- Q. People want to know that -- that they're not
- 24 going to have to pay a higher rate than their
- 25 competitors, for example.

- 1 You agree with that?
- 2 A. I don't totally agree with that because I
- 3 don't have experience here.
- 4 Q. Okay. Let me -- let me ask you a little bit
- 5 more about 802.11 since you've built products compliant
- 6 with that standard.
- 7 Is 802.11 a wireless standard? You'd agree
- 8 with that, wouldn't you?
- 9 A. Yes, sir.
- 10
- 11 Q. But there are a lot of other wireless
- 12 standards, too, aren't they?
- 13 A. Yes.
- Q. GSM is a wireless standard?
- 15 A. Yes.
- 16 Q. 3G?
- 17 A. Sure.
- 18 Q. 4G?
- 19 A. Sure.
- Q. TDMA and the CDMA?
- 21 A. Sure.
- Q. All of those are wireless standards.
- Now, for GSM and 3G and 4G and TDMA and CDMA,
- 24 those wireless standards, you can make phone calls using
- 25 those standards, correct?

- 1 A. Sure.
- Q. But you can use phone calls using 802.11, too,
- 3 can't you?
- 4 A. Yes, you can.
- 5 Q. Do you think that ideas in one wireless
- 6 standard could be useful in another wireless standard?
- 7 A. Yes.
- 8 Q. All right. Now, I know that -- that you've
- 9 told us that you're not -- you weren't personally a
- 10 participant in IEEE meetings, but I want to ask you this
- 11 question, and you -- you tell me if you think it's
- 12 fairly within your knowledge of this industry as a
- 13 person who supervised these products and their
- 14 development and to some extent, people's participation
- 15 in standards.
- 16 When the IEEE develops a new standard, do they
- 17 ever include any pre-existing technology in the new
- 18 standard?
- 19 A. Yes.
- 20 Q. Okay. If that pre-existing technology is
- 21 covered by a patent, then that patent would cover the
- 22 new standard, wouldn't it?
- 23 A. I don't know.
- Q. Well, it's kind of a matter of logic. If --
- 25 if there's a piece of technology and it's covered by a

- 1 patent and it pre-exists the standard and the people
- 2 setting up the new standard decide, yeah, we're going to
- 3 put that in the new standard, too, you'd expect that
- 4 that patent, for the pre-existing technology, would now
- 5 cover the new standard into which that technology had
- 6 been adopted, wouldn't you?
- 7 A. I'm sorry, I don't know.
- 8 Q. Okay. Does Intel sell 802.11 chips to
- 9 Hewlett-Packard?
- 10 A. As far as -- when I was there, we did, and I
- 11 have no reason to believe we don't -- still don't, yes.
- 12 Q. When you were selling the chips, did Intel
- 13 indemnify Hewlett-Packard?
- 14 A. I can't remember what our agreement said back
- 15 then, but generally, we entered into agreements where we
- 16 would indemnify companies. And I entered into some of
- 17 those agreements, but I can't speak for Hewlett-Packard.
- 18 Q. Okay. How about Dell? Does Intel indemnify
- 19 Dell in this suit?
- 20 A. I can't speak to the specific agreements, but
- 21 I have general experience that we do offer
- 22 indemnification to our customers.
- Q. How about Toshiba and Acer?
- 24 A. I don't know.
- Q. Okay. Well, if there's -- if there's a

- 1 pleading in this case in which I could show you -- and
- 2 I'll be glad to if you feel more comfortable if I did --
- 3 but if there's a pleading in this case in which Intel
- 4 asks to join this lawsuit because, among other reasons,
- 5 it indemnified Toshiba and Acer, you wouldn't be
- 6 surprised, would you?
- 7 A. If -- if we have agreements with our -- with
- 8 our customers like that, we would stand behind those
- 9 agreements.
- 10 Q. Okay. And what that indemnity means -- what
- 11 does that indemnify mean when you say you have -- you
- 12 give them indemnity?
- 13 A. In my experience, where -- if something
- 14 happened in the agreement where they were sued, then
- 15 if -- if there was a specific in the agreement, we'd
- 16 stand behind that customer.
- Q. What do you mean, stand behind them?
- 18 A. We'd -- we'd pay whatever the agreement said
- 19 we'd pay.
- 20 Q. Okay. You'd -- you'd be responsible for
- 21 paying for their infringement?
- 22 A. Well, there can be lots of terms around it,
- 23 limitations. But generally speaking, we'd stand behind
- 24 our -- we always stand behind our agreement.
- 25 Q. You'd come into court and defend them; is that

- 1 accurate?
- 2 A. I -- I don't -- I wouldn't totally agree with
- 3 that.
- 4 Q. You don't agree with that?
- 5 A. No, I said I wouldn't totally agree with that.
- 6 Q. Okay. Would you partially agree with it?
- 7 A. I guess, yeah.
- 8 Q. Okay. Now, let me ask you finally about the
- 9 relationship between patent holders and Intel and its
- 10 customer.
- 11 Let's suppose that Intel could get a license
- 12 from Ericsson for its patents in this lawsuit for a
- 13 penny. You with me?
- 14 A. I'll try. I'm not sure.
- 15 Q. Okay.
- 16 A. I mean, I understand what you're saying, but I
- 17 don't know where you're going.
- 18 Q. Well, that's because I haven't gone there yet.
- 19 A. Okay.
- Q. But so far, I'm only this far.
- 21 A. Okay.
- Q. I'm asking you to assume that Intel gets a
- 23 license from Ericsson, either because Ericsson agrees or
- 24 because the jury finds --
- 25 A. Okay.

- 1 Q. -- that it's only worth a penny to Intel, and
- 2 Intel gets a license now for one penny. What's your
- 3 understanding of how much Ericsson can collect, under
- 4 those circumstances, from your customers, the other
- 5 Defendants in this lawsuit?
- 6 A. I don't know.
- 7 Q. Okay. You know, don't you, that you can only
- 8 collect once for the patent? If you collect from Intel,
- 9 you can't collect any additional royalty from the
- 10 customers.
- 11 A. I've heard that in testimony this week, but I
- 12 don't know that.
- 13 Q. Okay. Well, you're not a lawyer, and I'm not
- 14 asking you to give a legal opinion.
- 15 But what you understand, and we certainly
- 16 haven't heard anybody suggest to the contrary, is, if
- 17 Intel can convince the jury to give a one-penny royalty
- 18 to Intel, then Ericsson gets one penny from Intel and
- 19 zero from the customers. You've heard that, haven't
- 20 you?
- 21 A. I've heard that, yes.
- 22 Q. Okay. And Intel is not the only chip maker
- 23 that these companies buy 802.11 chips from, are they?
- 24 A. No, sir.
- 25 Q. Intel competes with other companies. You've

- 1 named some of them: Atheros and Broadcom, right?
- 2 A. Yes.
- 3 Q. And you know that Intel is in some pretty
- 4 fierce competition with them, right?
- 5 A. Yeah, we compete vigorously.
- 6 Q. Okay. So if what you've heard in the
- 7 courtroom is true, if Intel can get a license for a
- 8 penny, couldn't it go to its prospective customers and
- 9 say, hey, if you buy Broadcom or Atheros, you may have
- 10 to pay Ericsson 50 cents? But if you buy from us, you
- 11 don't have to pay anything. That could happen, couldn't
- 12 it?
- 13 A. I don't know.
- 14 Q. Okay.
- 15 MR. CAWLEY: I'll pass the witness, Your
- 16 Honor.
- 17 THE COURT: All right. Redirect?
- 18 MR. DAUCHOT: Briefly, Your Honor.
- 19 REDIRECT EXAMINATION
- 20 BY MR. DAUCHOT:
- 21 Q. The -- so was this as bad as your interview?
- 22 A. I don't know. I don't feel like I did so
- 23 good.
- Q. All right. Let's -- I want to focus on just
- 25 one part of the cross-examination, and, that is the

- 1 50-cent issue. And there was some discussion back and
- 2 forth about, you know, what would happen if -- if Intel
- 3 had to pay 50 cents today on the Ericsson patents, et
- 4 cetera.
- 5 And -- and you testified something about
- 6 the -- on the question of discrimination, something
- 7 about, you know, folks working on the 802.11 standard
- 8 having an issue with costs coming in later. Do you
- 9 remember that testimony?
- 10 A. I think so.
- 11 Q. All right. So -- so let's focus -- we're
- 12 during the standard setting process, right? You folks
- 13 are sitting here trying to figure out what technology
- 14 we're going to put in, what technology are we not going
- 15 to put in, right?
- 16 A. Right.
- 17 Q. And during your experience back in the 2000
- 18 time frame, you remember from time-to-time issues coming
- 19 up about, hey, are we going to go this route or this
- 20 route?
- 21 A. Yes, I remember that.
- Q. And costs, I would assume, came into the
- 23 equation, as well?
- 24 A. It never happened. But if -- if -- if one of
- 25 our competitors had brought in a proposal that was going

- 1 to put a cost on our product of 50 cents, it would have
- 2 been escalated to me.
- 3 O. Okay. It would have been escalated to you.
- 4 Why does it get escalated to you?
- 5 A. Because I end up owning the business statement
- 6 and the commitments we've made.
- 7 Q. All right. And how do you react to 50 cents,
- 8 given what you all were trying to accomplish in terms of
- 9 low-cost interoperability?
- 10 A. Inconsistent with what we were trying to
- 11 achieve.
- 12 Q. And how so? Why does the 50 cents create a
- 13 problem?
- 14 A. Well, if you look at where we're at today,
- 15 which was, you know, what we strive to and what we
- 16 have -- kind of what we had achieved on the Ethernet
- 17 standards, 50 cents on 2.50 ends up being a big problem.
- 18 Q. And so the proposition was that it would just
- 19 be a -- quite a simple matter, just tack the 50 cents on
- 20 to the 2.50, and, hey, pass it on to the OEMs. Did you
- 21 get that -- did you hear that suggestion?
- 22 A. I don't remember hearing that, but it -- it
- 23 would have been a problem as we were trying to develop
- 24 products for the standard.
- Q. All right. And why so?

- 1 A. Because we were trying to -- we were trying to
- 2 drive the cost down so every laptop and device could
- 3 include Wi-Fi and then use it anywhere. And driving
- 4 prices up is exactly in the face of what we were trying
- 5 to achieve.
- 6 Q. All right. Now, one final question. There
- 7 was a question as to whether or not the chip price of
- 8 Intel includes a cost in there for Ericsson's licenses.
- 9 Do you remember that question?
- 10 A. Yes, sir.
- 11 Q. And I think you testified no. Correct?
- 12 A. Yes, I did.
- Q. And why not?
- 14 A. Because we don't use it.
- 15 Q. All right. Thank you, sir.
- MR. DAUCHOT: That's all I have.
- 17 THE COURT: Any recross?
- MR. CAWLEY: No, Your Honor.
- 19 THE COURT: All right. Thank you.
- 20 All right. If the Members of the Jury
- 21 will pass down your witness questions.
- 22 (Pause in proceedings.)
- MR. DAUCHOT: Your Honor, just for the
- 24 record, may this witness be excused?
- THE COURT: Not yet.

90 1 MR. DAUCHOT: Oh, I'm sorry. 2 (Pause in proceedings.) THE COURT: All right. Ladies and 3 Gentleman of the Jury, we're going to go ahead and take our lunch break at this time, and we'll be in recess 5 until 12:30. 6 7 Please follow the Court's instructions 8 and don't discuss the case among yourselves, and enjoy 9 your lunch. We'll see you back here at 12:30. 10 COURT SECURITY OFFICER: All rise. 11 (Jury out.) 12 THE COURT: Please be seated. 13 All right. We have a question from the jury that says: Can we see copies of patents that Intel 14 15 uses for their chips? Patent numbers or licenses from other inventors' patents. 16 17 MR. CAWLEY: If that's -- that's outside the evidence, Your Honor. I guess it's outside the evidence. I'm not aware that there is such evidence in the case at this point. I think that it would be 20 improper to go into that with this witness. 21 22 THE COURT: Okay. All right. 23 MR. DAUCHOT: Your Honor, we agree, at 24 least at this juncture.

THE COURT: All right. The Court will

1 not ask that question. I think it -- it really 2 violates -- they're supposed to ask questions relating 3 to this witness's testimony, and this is just more of a general -- general request. But that will -- anything further before we adjourn for lunch? MR. CAWLEY: Nothing from Plaintiff. 6 7 THE COURT: All right. We'll --Excuse me? 8 9 MR. DAUCHOT: I'm sorry, Your Honor. Is that the only question of the witness? 10 11 THE COURT: Yes, he may be excused. 12 MR. DAUCHOT: May he now be excused? 13 THE COURT: Yes. 14 MR. DAUCHOT: Thank you. 15 THE COURT: All right. Be in recess. (Lunch recess.) 16 17 18 19 20 21 22 23 24 25

1 CERTIFICATION 2 3 I HEREBY CERTIFY that the foregoing is a true and correct transcript from the stenographic notes of the proceedings in the above-entitled matter to the best of our abilities. 7 8 /s/ Shea Sloan SHEA SLOAN, CSR 10 Official Court Reporter State of Texas No.: 3081 11 Expiration Date: 12/31/14 12 13 /s/ Judith Werlinger 14 JUDITH WERLINGER, CSR Deputy Official Court Reporter 15 State of Texas No.: 731 Expiration Date 12/31/14 16 17 18 19 20 21 22 23 24 25